

## ABSTRACT

An apparatus for automatically measuring soil pH at a relatively large number of places in a field, and automatically creating a soil pH map by simultaneously measuring the position of the apparatus and storing the pH data in association with the location from which the corresponding soil sample was taken. The apparatus includes a wheeled chassis, a shank for exposing soil at a controlled depth, a sampling tray for collecting soil, a probe for measuring the pH of the soil, a water supply for cleaning the probe between measurements, a device for measuring the location of the apparatus, and a computer for controlling the measurement cycle and recording the data.